

Industrial Innovation is in transition; what about innovation policies?

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- Industrial Innovation in Transition
 - Innovation ecosystem
 - Democratising innovation
 - It takes two to tango
- Absorptive capacity of firms
- Policy conclusions

Industrial Innovation in Transition

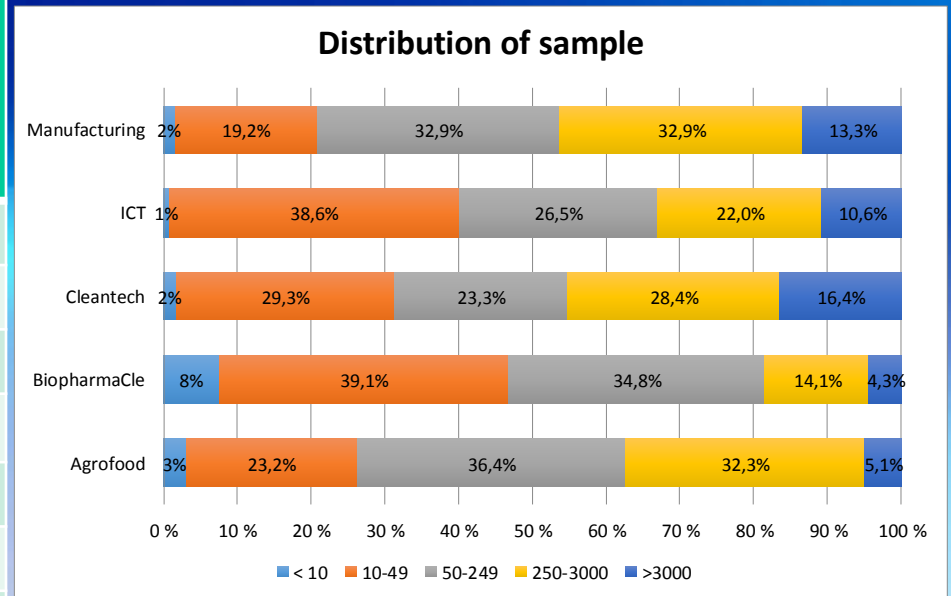


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Sample

Country	Interviews conducted	Interviews in analysis
AT	75	100 %
CZ	75	100 %
DE	50	100 %
EE	80	100 %
ES	90	100 %
FI	69	100 %
IE	44	100 %
IT	45	100 %
NL	48	100 %
PT	25	100 %
UK	93	100 %
Total	694	



N.B. In some questions multiple choices were allowed

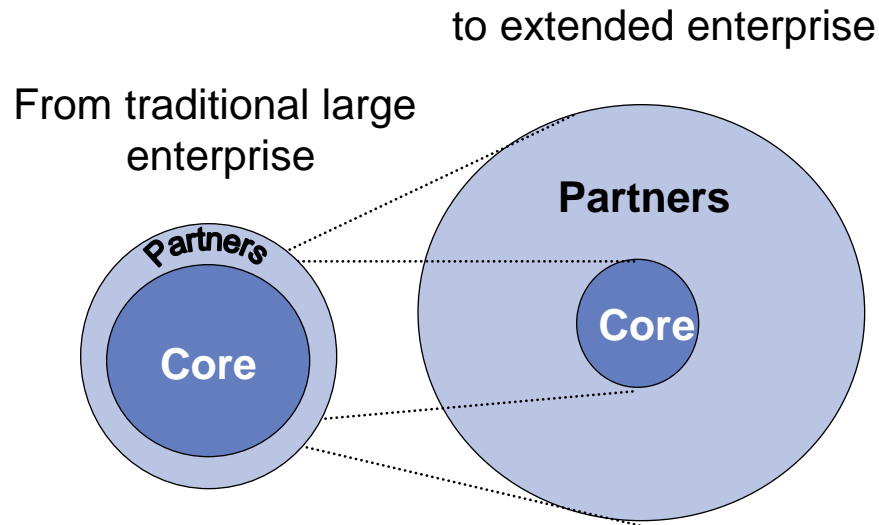


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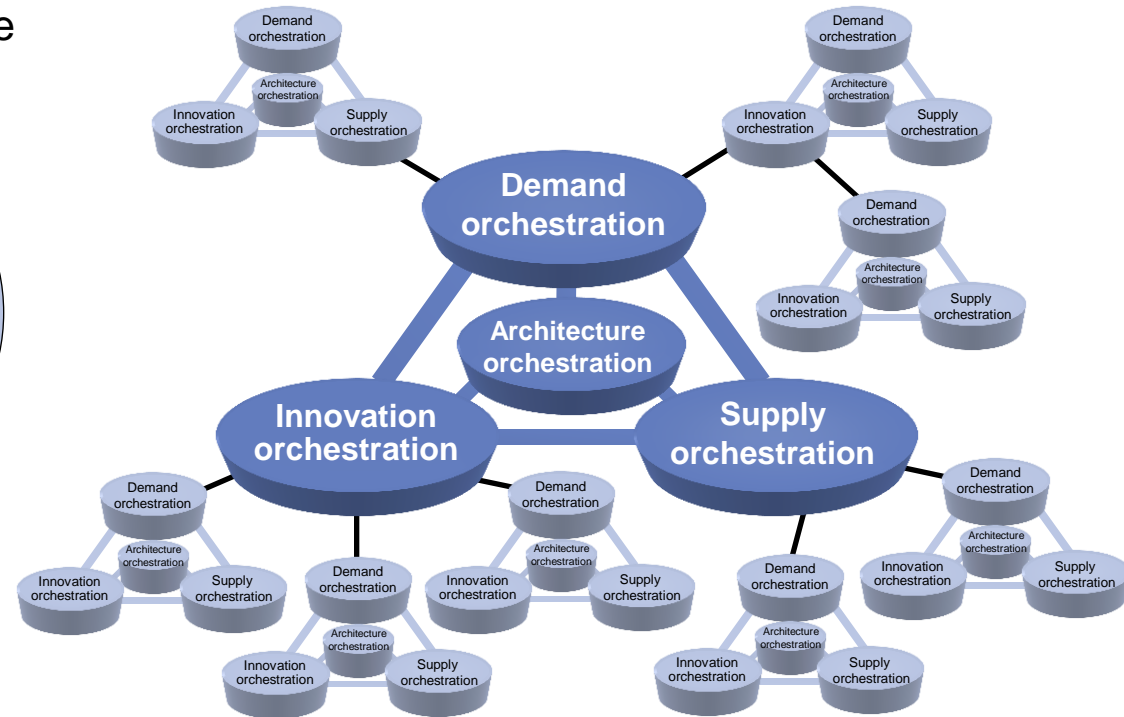
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Innovation Ecosystem

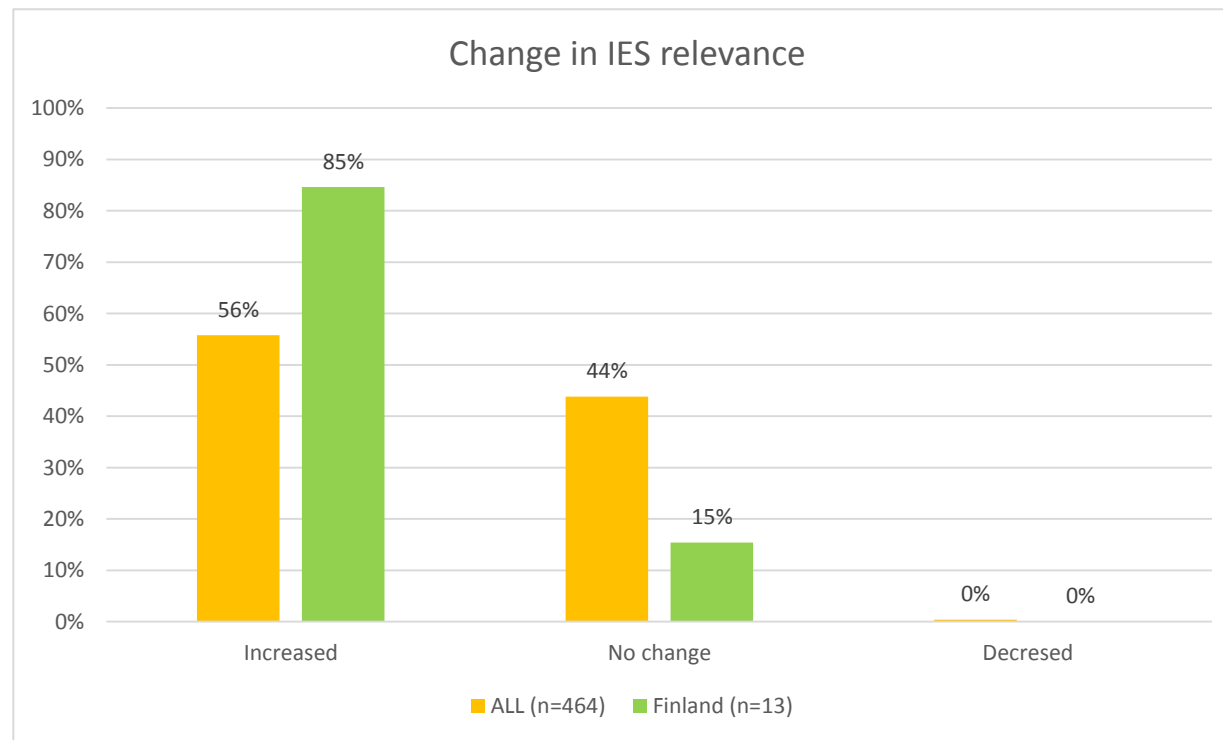
enable new ways of knowledge creation and utilization



with orchestration capability



Innovation ecosystems – an embedded approach?



Change in relevance of innovation ecosystems in the last 5-10 years



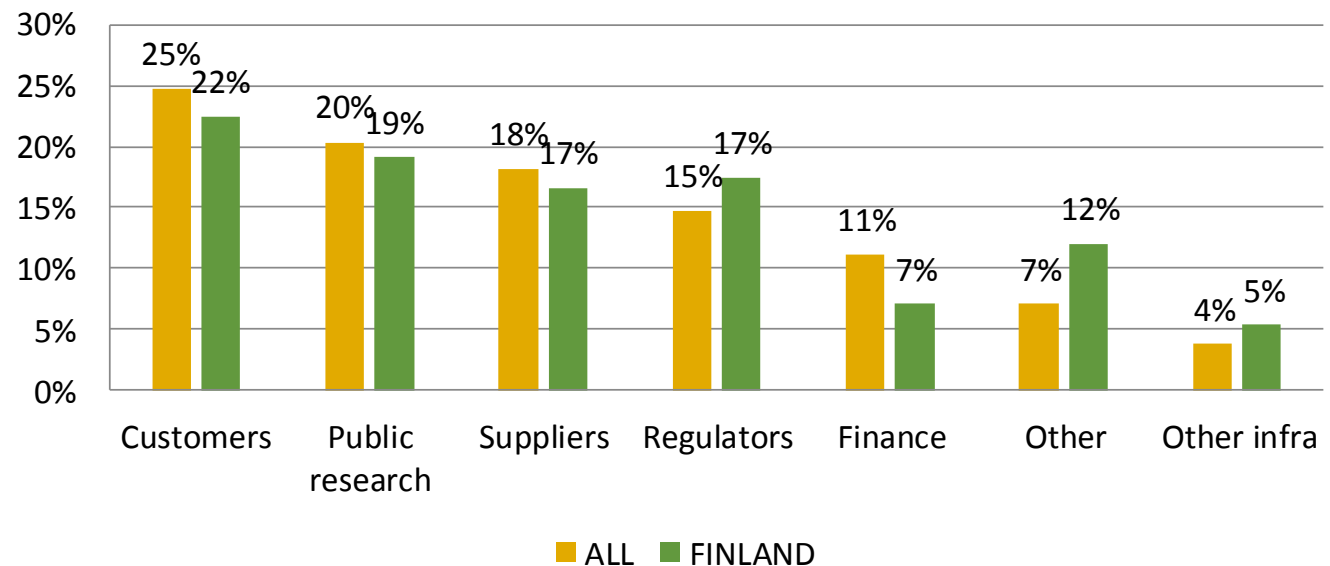
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IES Stakeholders



Innovation Ecosystem Stakeholders Total n=694, Finland n=69

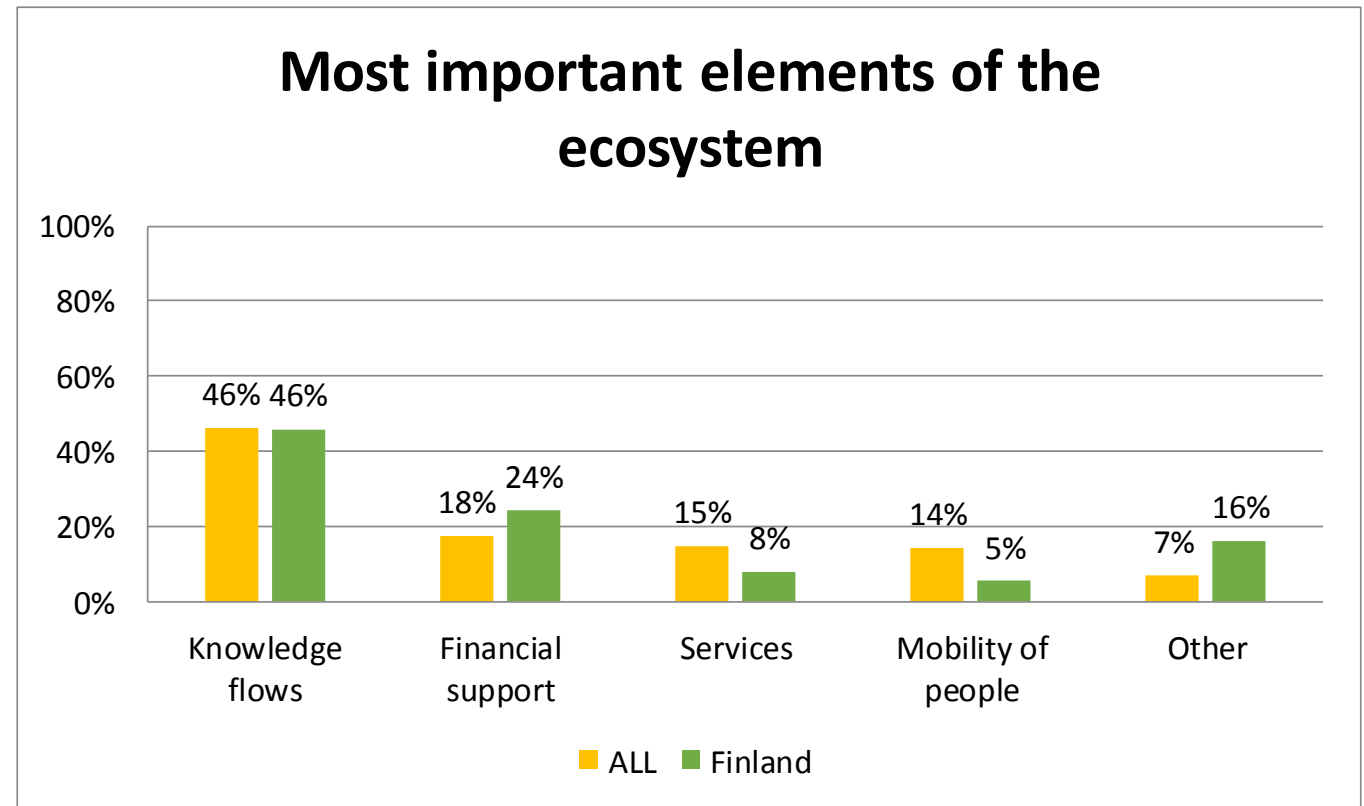


- Customers have the highest importance for companies.
- Interestingly they are followed by PRB (interaction with knowledge providers is rated high).

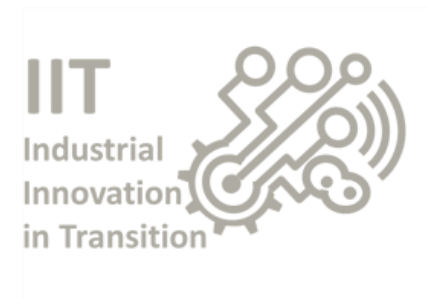




IES interactions: Most important elements



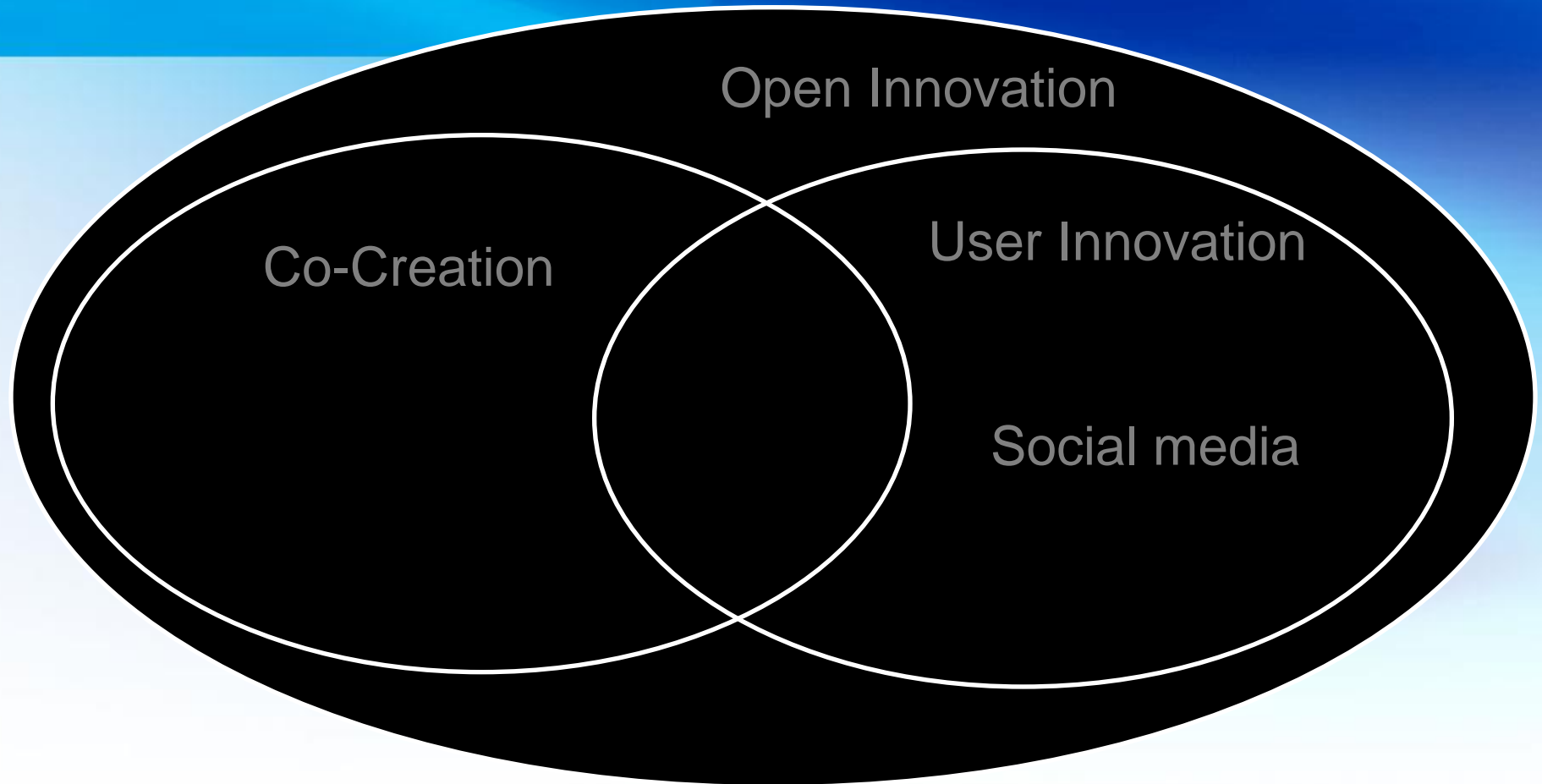
Knowledge flows are central for companies (reinforces the result of public research bodies being crucial for companies).



Democratising innovation

- The physical and virtual worlds blend allowing people to contribute and be involved
- Clouds, Do-It-Yourself (DIY), social media, blended worlds and sensing surroundings will become key platforms for innovation.
- Creativity and imagination combined with good competence are key characteristics of future innovators.

Crowdsourcing

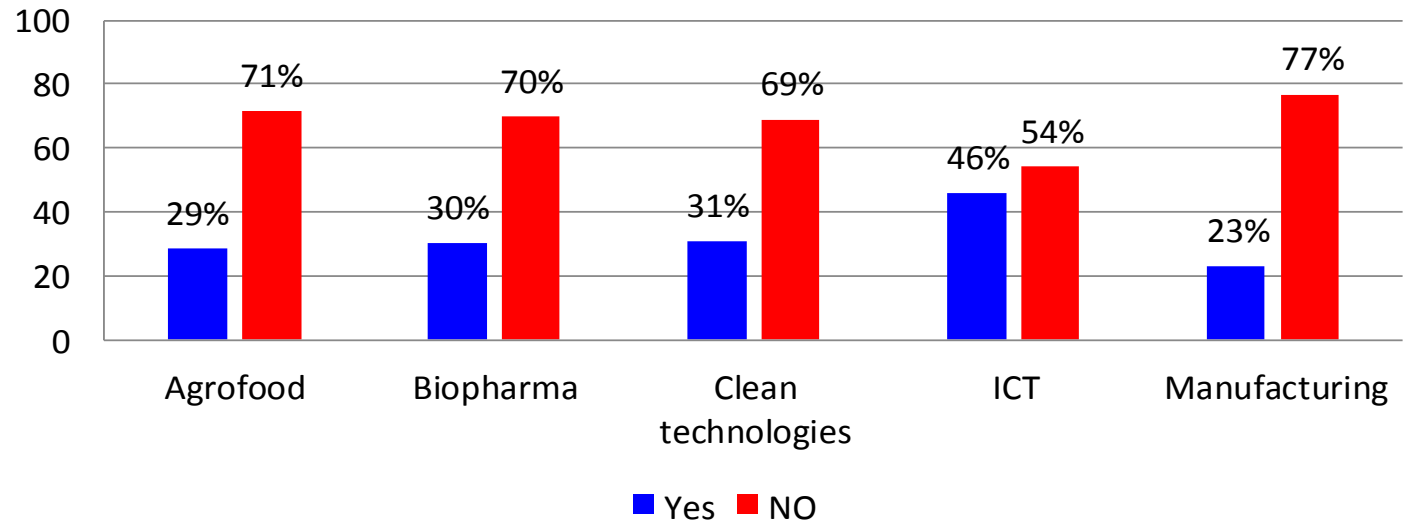


Source: Modified from Schenk and Guittard, 2009

Big Data usage in Innovation; Industry Sectors



**Use of BIG DATA
(ALL, n=563)**



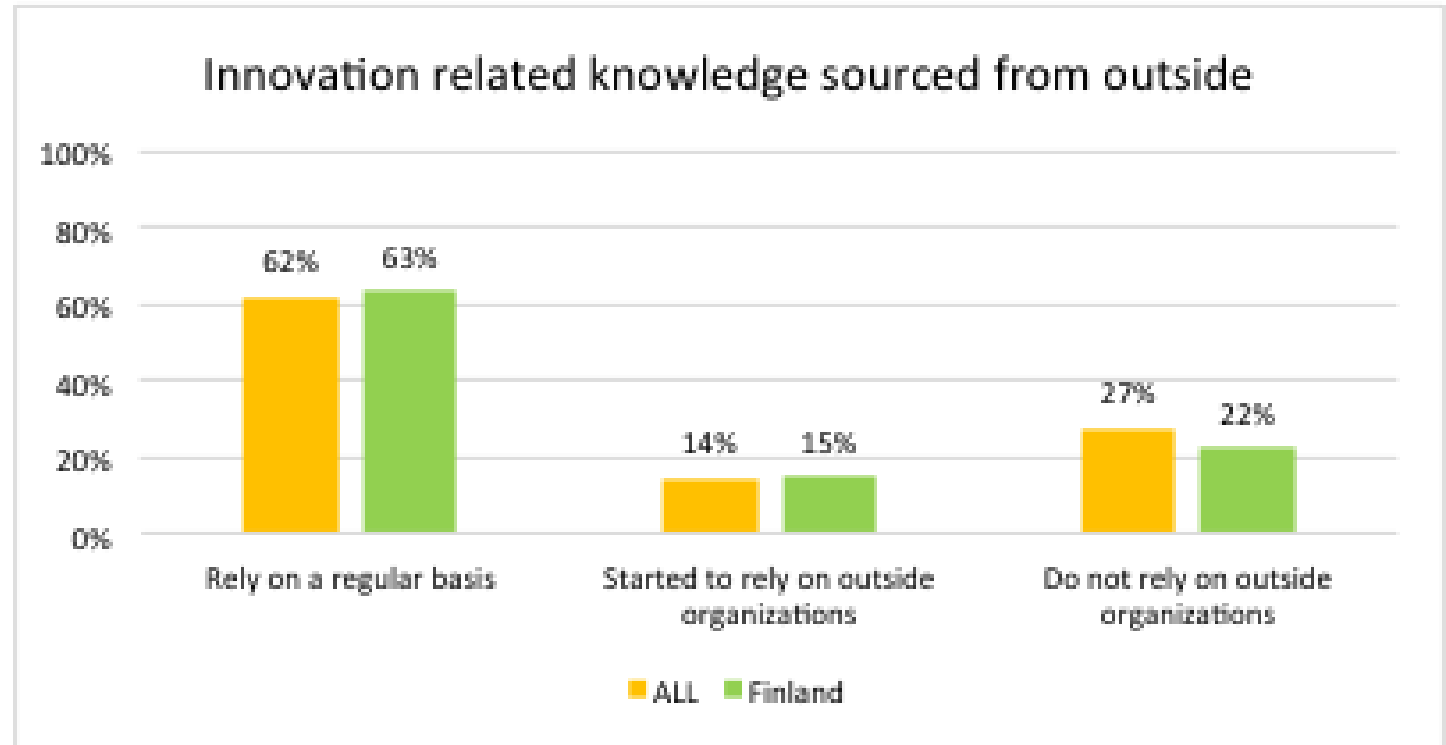
Open Innovation

Engaging external partners

- Access and drive global intellectual vision and insight
- Form strategic collaborations with world-leading institutions to multiply our efforts
- Build global test beds to learn from broader audiences



IES interactions: OI-activities



- All, N = 566; Fin, N = 27
- 76 % of the companies indicated that they engage in OI-activities.



Three basic missions of universities

Research

University

**Knowledge
sharing**

Education

Open Innovation/Knowledge Sharing

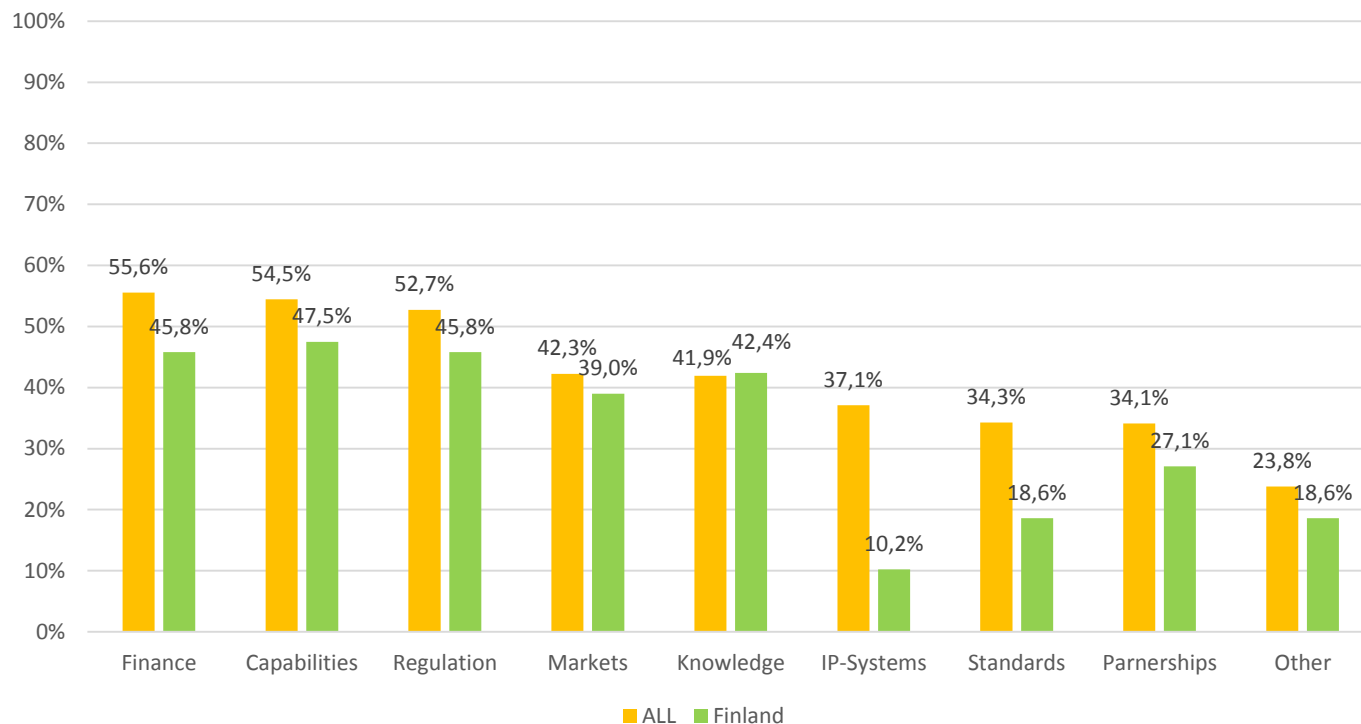
- Complementary competence and excellence
- Genuine commitment for knowledge sharing/trust
- Collaboration platforms/joint campus presence
- Mobility of research personnel
- R&D/recruitment/education all involved
- Transparent management and collaboration rules
- Fair rules for IPR ownership and use
- Reformed reward and incentive systems

Absorptive Capacity of firms; Six Key Principles

- Personal motivation and incentives
- Enabling management system
- Efficient use of web tools
- Extensive collaboration with external partners
- Stimulating corporate culture
- Creative and innovation oriented people

Public policy plays an important role

Barriers for industrial innovation



Includes only “yes”-answers, multiple choices were allowed.

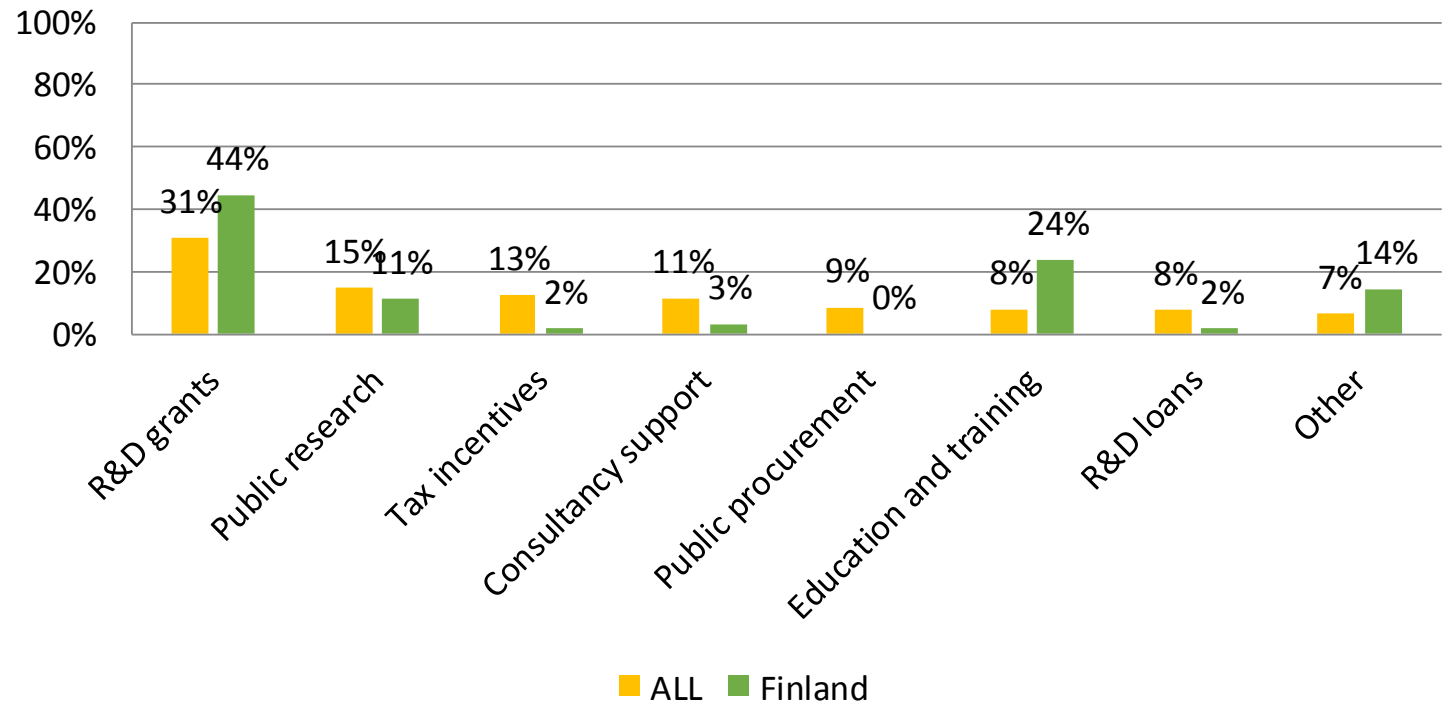


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Initiatives for innovation

Public policy initiatives



Industrial
Innovation
in Transition

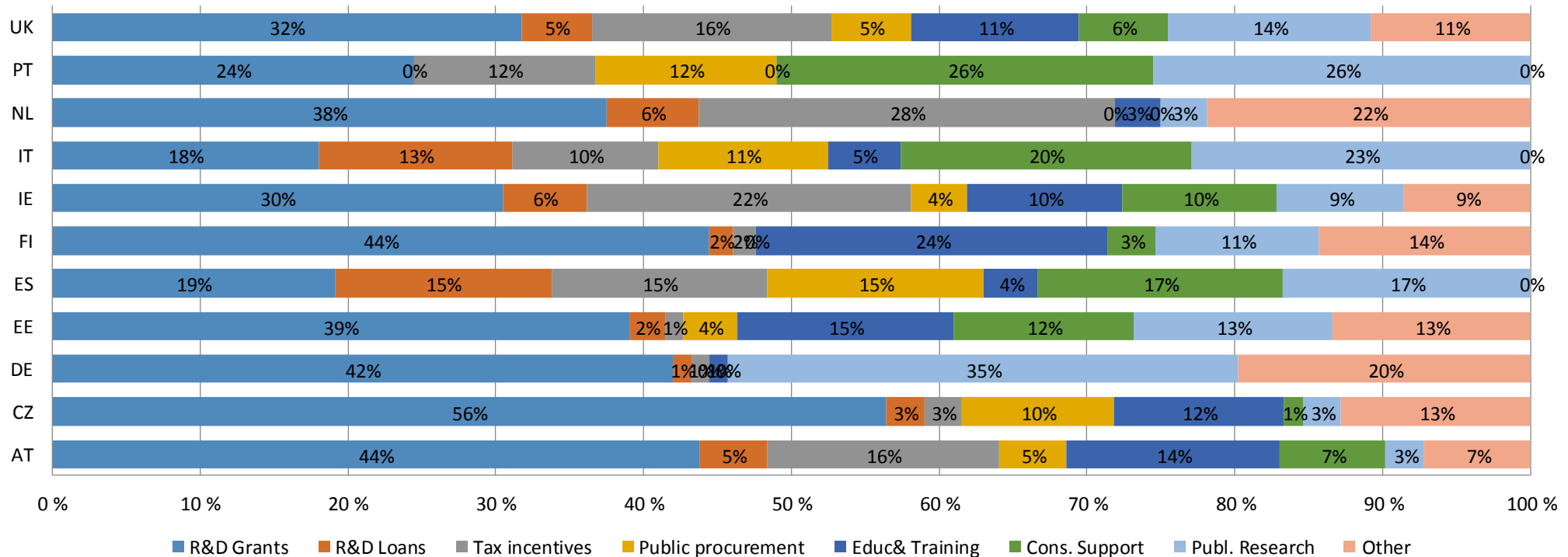


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Policy initiatives by countries

MOST IMPORTANT PUBLIC POLICY INITIATIVES



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Policy recommendations, IIT Finland 2014

- Innovation policy should help the natural integration of the new innovation instruments into the innovation processes in companies
- Improving conditions for public/private partnerships
- Increasing the understanding of the role of innovation in economic and social development as well as in job creation
- In Finland the most important issue in reforming innovation policy is to strengthen the part of the innovation system that genuinely supports the development of new and internationally competitive business
 - Understanding of business concepts, emerging value domains and the ways of capturing the value
 - Improving systems integration in the innovation system
 - Funding of growth companies
 - Developing company spin-offs and business incubators

Preliminary Policy Conclusions, IIT 2017

- Ecosystems drive innovation
- People
 - Reform education to provide skills for innovation and entrepreneurship
 - Increase cross-sectorial mobility of people
- Financing
 - Improve public funding for innovation (volume, rules and impact)
 - VC: seed funding; growth phase
- Ecosystem game:
 - Improve conditions for public/private partnerships
 - Adopt systemic approach: support the evolution and expansion of ecosystems
 - Assess always the impact of a regulation on innovation
 - Increase public procurement of innovative solutions
 - Improve access to markets

A scenic landscape featuring a calm body of water in the foreground, reflecting the sky and the surrounding forest. The forest consists of trees with autumn foliage in shades of green, yellow, and orange. The sky is bright and clear, with a soft glow from the sun. The text "Thank you" is centered in the middle of the image in a green, sans-serif font.

Thank you